AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

Claims 1 – 4 (Canceled)

5. (Currently Amended) A liquid crystal display for image display using a liquid crystal display panel, comprising:

a write-gray scale level determining section for determining write-gray scale level data for input image data that compensates an optical response characteristic of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from a previous vertical display period to a current vertical display period;

an achievable gray scale level determining section for generating achievable gray scale level data for input image data after a lapse of one vertical display period of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from one vertical display period to the next; and

a temperature detector for detecting a device interior temperature, wherein

the achievable gray scale level determining section has a plurality of achievable gray scale level table memories for a plurality of device interior temperatures,

~~wherein~~ each of the plurality of achievable gray scale level table memories stores achievable gray scale level parameters, each representing achievable gray scale brightness after

the lapse of one vertical display period of the liquid crystal display panel, obtained from the optical response characteristics of the liquid crystal display panel,

~~wherein~~ the write-gray scale level determining section has a plurality of write-gray scale level table memories for a plurality of device interior temperatures and determines the write-gray scale level data to be supplied to the liquid crystal display panel~~, based on achievable gray scale level data of the liquid crystal display panel, corresponding to input image data at the previous vertical display period, output from the achievable gray scale level determining section and the input image data at the current vertical display period~~ by referring to one of the plurality of write-gray scale level table memories, and

~~wherein~~ the achievable gray scale level determining section selects, from the plurality of achievable gray scale level table memories, an achievable gray scale level table memory for the detected device interior temperature, and determines the achievable gray scale level data by referring to the selected achievable gray scale level table memory.

6. (Currently Amended) ~~The~~ A liquid crystal display ~~according to Claim 5~~, for image display using a liquid crystal display panel, comprising:

a write-gray scale level determining section for determining write-gray scale level data for input image data that compensates an optical response characteristic of the liquid crystal display panel, in accordance with, at least, a combination of gray scale level transitions from a previous vertical display period to a current vertical display period;

an achievable gray scale level determining section for generating achievable gray scale level data for input image data after a lapse of one vertical display period of the liquid crystal

display panel, in accordance with, at least, a combination of gray scale level transitions from one vertical display period to the next; and

a temperature detector for detecting a device interior temperature, wherein

the achievable gray scale level determining section has a plurality of achievable gray scale level table memories for a plurality of device interior temperatures,

each of the plurality of achievable gray scale level table memories stores achievable gray scale level parameters, each representing achievable gray scale brightness after the lapse of one vertical display period of the liquid crystal display panel, obtained from the optical response characteristics of the liquid crystal display panel,

the write-gray scale level determining section determines the write-gray scale level data to be supplied to the liquid crystal display panel, based on achievable gray scale level data of the liquid crystal display panel, corresponding to input image data at the previous vertical display period, output from the achievable gray scale level determining section and the input image data at the current vertical display period,

the achievable gray scale level determining section selects, from the plurality of achievable gray scale level table memories, an achievable gray scale level table memory for the detected device interior temperature, and determines the achievable gray scale level data by referring to the selected achievable gray scale level table memory,

~~wherein~~ the write-gray scale level determining section has a plurality of write-gray level table memories for a plurality of device interior temperatures,

~~wherein~~ each of the plurality of write-gray scale level table memories stores write-gray scale level parameters, each representing write-gray scale brightness in accordance with a combination of gray scale level transitions, and

~~wherein~~ the write-gray scale level determining section selects, from the plurality of write-gray scale level table memories, a write-gray scale level table memory for the detected device interior temperature, and determines the write-gray scale level data by referring to the selected write-gray scale level table memory.

7. Previously Presented) The liquid crystal display according to Claim 5, wherein the achievable gray scale level parameters stored in each of the plurality of achievable gray scale level table memories are achievable gray scale level parameters for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly.

Claim 8 (Canceled)

9. (Previously Presented) The liquid crystal display according to Claim 6, wherein the write-gray scale level parameters stored in each of the plurality of write-gray scale level table memories are write-gray scale level parameters for a representative gray scale level transition pattern of every representative gray scale level distributed evenly or unevenly.